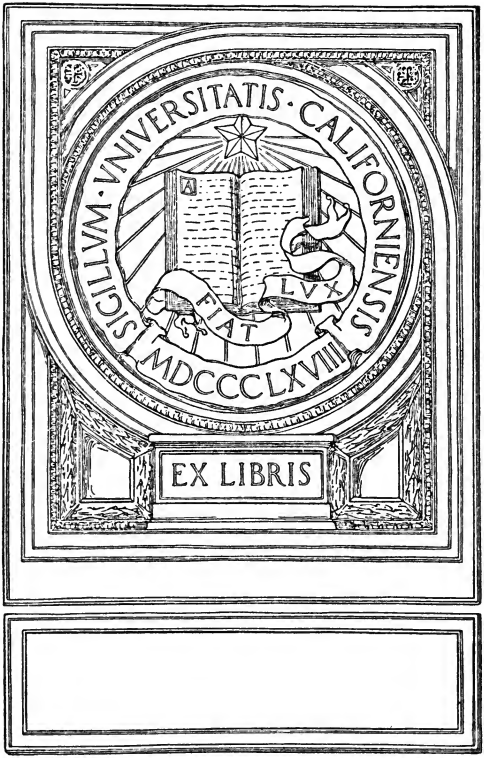
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THE ELEMENTS OF RECONSTRUCTION

THE ELEMENTS OF RECONSTRUCTION

A SERIES OF ARTICLES
CONTRIBUTED IN JULY
AND AUGUST 1916 TO

The Times

By "D. P."

[H. G. WELLS]

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INTRODUCTION

THIS little volume is a reproduction of six articles which appeared some little time ago in the columns of the *Times*. I know nothing about the authors except what can be gathered from their own writing. But the articles from the outset arrested my attention, as they doubtless did that of many others, by their originality and breadth of view, and so I read on with steadily growing interest and sympathy. The suggestions of the writers appeared to me to deserve more than a cursory perusal, and I am glad that they are now to be given to the public in a permanent form.

The tremendous upheaval caused by the war has led to great searchings of heart, and the air is full of bold and sometimes rather wild speculation about fundamentals. 'It is not often

in our history,' as some one has recently said,* 'that the nation has found time to think. Now, by a curious paradox, while the flower of her youth and strength are fighting for her freedom and her life, the others have a chance of thinking out the best use to which that life and freedom can be put when they are safe once more. Indeed at the present time activity is as marked in the field of ideas as it is in the field of war.' What is characteristic about that activity is its unusual freedom from the shackles of dogma and convention. It may be said—using the word in no party sense—that we are all Radicals to-day, all prepared to entertain, and to judge dispassionately on their merits, proposals which only a few years ago would have seemed wildly revolutionary. But with all this speculation going on, much of it

* 'Report of the Committee of the Privy Council on Scientific and Industrial Research,' p. 19.

excellent in quality, there is some danger of distraction. There is a limit to what can be done, all at once, to alter the bases, social, economic and political, of our national life. We seem to be more than ever in need of synthesis, of some unifying principle, else we may easily find ourselves pursuing a number of ends which, though perhaps individually commendable, are incompatible with one another. Hence we have cause to be grateful to any one who seeks, like the authors of this volume, to cover the whole field, to see all the main objects of the new national endeavour in their relation to one another, and to find principles by which they can be worked into a coherent scheme.

So bold an enterprise has the faults of its qualities. No human mind can be equally familiar with the ins and outs of all the large and diverse questions here brought under review.

And it is no disparagement to the authors of this volume to say that they seem to me less at home in dealing with the constitutional and political aspects of their subject than with the economic and social. Not that their handling of the former is without merit and interest. I, of all men, should be the first to welcome their clear perception that the problem of reconstruction is not merely a British but an Imperial problem, and their advocacy of 'the development of the present British Parliament into an Imperial Parliament with oversea representatives,' leaving the purely local concerns of the United Kingdom to be dealt with by subordinate assemblies. Nor am I any less in sympathy with their attitude to our outworn party divisions—the 'bilateral system of conflict about false issues,' now happily in abeyance, and never, let us hope, to be revived in its old insincerity. As that system

has been found an intolerable encumbrance in time of war, it would certainly be no less wasteful and futile when we come to deal with the colossal problems which the return of peace will bring. If these problems are to be tackled with any prospect of a good result, the stereotyped old parties have got to disappear and to make room for fresh groups, whose members will be bound together by a genuine agreement of opinion on the live issues of the new age, not by a mechanical and meaningless acceptance of the shibboleths of a dead past. That this necessary regrouping would be assisted by a change in our methods of election, and especially by the adoption of what is known as 'proportional representation,' is a point on which our authors lay particular stress. 'The sane method of voting is known as Proportional Representation with large constituencies and the single transferable vote, and it

is as reasonable and necessary that the country should adopt it as soon as possible as that it should adopt the right types of aeroplane and the best sorts of gun. The advantage of this method is not a matter of opinion, but a matter of demonstration.' That is a strong statement, though personally I do not disagree with it. But I find more difficulty in accepting another and even more drastic reform, which the writers advocate with equal insistence, namely, the substitution of 'occupational' for local constituencies. And without going into the merits of this proposal, about which much might be said by way of criticism, it is in my humble opinion evident that the attempt to run two such radical changes concurrently is quite impracticable. Nor do our authors attempt to show us how the simultaneous adoption of these two new principles could be made to work. In this as in other

portions of their schemes of constitutional change there is indeed much that is ingenious and attractive. But I cannot help feeling that we are sometimes getting rather far away from the immediately possible. I doubt whether the writers have much experience of actual politics. In their excursions into that region, so inhospitable to philosophy, they do not seem to have their feet quite on the ground.

Very different is the impression made upon my mind by the chapters which deal with the industrial future. The breadth of view and boldness of imagination, which are the great merits of the whole treatise, are in this portion of it buttressed by a familiarity with existing conditions and a close touch with fact. Opinions may differ about many of the arguments of the writers. But no serious student of the subject can fail to benefit from contact with their ideas

or to recognise the insight, the grasp, and the architectonic quality of their work. They are not scratching the surface of the question, but going to the root of it. In following their lead the reader will find himself constantly at the centre of the problem, not wandering in the outskirts and on the fringes of it. And I shall be greatly surprised if he does not feel, when he puts down the book, that it has saved him from pursuing many false scents and has shed new light upon the few big essential points, on which it has caused him to concentrate his attention.

On none of these points is the case of the writers more clear and convincing than when they are pressing home the intimate connection between the reform of our educational system, now so loudly demanded—which aims at much more and better teaching of science—and such a reorganisation of our great national industries as

will enable us to make good use of the increased number of men of scientific training whom our schools and colleges are asked to turn out. 'To educate without creating opportunity,' as they truly say, 'is to set a bonus upon the export of national ability.' I will not try to summarise their argument, which is already quite sufficiently condensed. The reader will be much better employed in studying it in their own words. But it may be interesting to point out how remarkably their contention on this head is reinforced by the recently published Report—from which I have already quoted—of the Committee of the Privy Council for Scientific and Industrial Research. In that Report, a remarkable document far above the average of official productions of its class, the opinion is expressed that 'a good deal of the inertia which British manufacturers have shown towards research may

have been due to a realisation, partly instinctive perhaps, but partly based on experience, that research *on the small scale they could afford* (the italics are mine) was at best a doubtful proposition.' And again, 'Our experience up to the present leads us to think that the small scale on which most British industrial firms have been planned is one of the principal impediments in the way of the organisation of research, with a view to the conduct of those long and complicated investigations which are necessary for the solution of the fundamental problems lying at the basis of our staple industries.'

Here we have precisely the same insistence on the "importance of scale" which the reader will find repeatedly illustrated in the following pages. The words I have just quoted might be paralleled by a number of passages in this volume. I will quote only one: 'Though a million pound

business may be easily able to sustain and profit by fifty chemists, of whom one now and again makes a paying discovery, it does not follow that a hundred thousand pound business can profitably sustain any chemists at all, much less keep up a laboratory for five. Although a State containing a number of big businesses may maintain a multitude of industrial scientific investigators employed in them, it does not follow necessarily that another State, although it contains many more businesses and those of greater aggregate value, can, if they are businesses of a smaller scale individually, employ any investigators at all. It certainly does not reflect unfavourably upon either the intelligence, the energy or the patriotism of the business men in the small-scale-business country, and it is high time that that sort of blame, which entirely confuses the issue, ceased.'

The authors of the Report and the

writers of this volume are both largely concerned with what, in the jargon of the day, are known as 'pivotal or key industries.' I think that the passages which I have just quoted from them may be said to contain a pivotal or key idea. It may turn out after all that the shortcomings with which it is just now the custom to reproach the British man of business, in contrast, for instance, with his German rival—his conservatism, his lack of enterprise, his neglect to avail himself of the aid of science, his reluctance to combine with his fellows for common ends—are not so much faults of character, as necessary consequences of an antiquated system, for which not individuals, but State policy, economic doctrine and wrong popular notions should share the blame. The majority of our men of business have no doubt been doing their best on the lines which they have always been taught, and

have themselves believed to be the only right ones. But the world has been moving at a tremendous pace, and the industrial and commercial methods and maxims of fifty or sixty years ago have, under the changed conditions, lost much of their virtue. They were the natural product of the transitional epoch which followed the Industrial Revolution. The mistake which most people then made was in thinking that the principles of Go As You Please and the General Scramble, which may have been necessary and even appropriate during the inevitable break-up of the Old Order, could possibly be the permanent foundations of the New. But we all recognise now that there must be a fresh effort of economic and social organisation. We see the crude and formidable beginnings of it already in the growth of mammoth businesses and combines and in the huge federations of Labour. They

are a product of the vast scale of modern enterprise resulting from the achievements of science in the development of mechanical power, and they render the position of the small isolated business and of the so-called 'free,' that is to say unassociated, labourer constantly more precarious and untenable. The drawback and evils of these great agglomerations are obvious, but they are after all the necessary raw material of the New Order. They only make for oppression and social conflict when they are not controlled in the interests of the community, and are directed, as they are even now not wholly directed, to the pursuit of purely selfish ends.

For this process of agglomeration is certainly going on. There is indeed no resisting it, and those who cannot accommodate themselves to inevitable conditions will presently be forced to the wall. The recognition of these

truths is no longer confined to the theorist and the outside observer. From the heart of the business world itself come the most urgent warnings against excessive unregulated competition and the loudest appeals for organisation on co-operative lines and for the helping hand of the State. I wonder whether many of my readers have met with a little book, published not long ago, bearing the title of 'Trade as a Science,' from the pen of Mr. Ernest Benn. I am afraid it has so far not attracted the attention it deserves, for it is full of practical knowledge and shrewd ideas, expounded in a terse, fresh, vigorous, not to say pugnacious style. It is written exclusively from the point of view of a man actually engaged in 'the making and selling of goods' who has not much use for professional economists and none at all for politicians. Yet this eminently practical person is just as condemnatory as

any member of the Fabian Society, of the 'individualistic, inarticulate, unorganised mass' of old-fashioned British trade. He sees as clearly as any one that the future belongs to big-scale businesses or to such smaller businesses as can learn to work together and to pool their resources for certain objects—the full use of scientific research being only one of them—which individually they are not strong enough to attain.

This modern tendency to concentration in business, alike on its productive and its distributive side, has all-important consequences beyond the economic sphere. It affects the whole structure of society and is responsible for the new views now steadily gaining ground of the functions and responsibilities of the State. Of this reaction of recent economic developments upon social and civic life our authors have much to say. It is indeed their central theme. And if in discussing it

within such narrow limits of space they are compelled, as they themselves confess, to be 'severely elementary,' I do not think they can be accused of any lack of thoroughness in laying out the ground. Perhaps the point at which the whole range of their constructive principles is most clearly exhibited is in the brilliant chapter on 'Scientific Agriculture and the Nation's Food.' Progressive agriculturists, in their uphill but increasingly hopeful struggle, will be grateful for the support here given to all their main objects by men who evidently are not of their number, but approach the subject from a new angle and purely from the national point of view. And if I dare add another sentence or two to an Introduction which has already run to excessive length, let me specially commend to them, and to others, what our authors have to say about the true place and also the limitations of a Tariff, or indeed of any form of

Protection, in a national economic policy. Their wise and discriminating words on this subject should show us a way out of what has now become a barren and boring controversy between Protectionists and Free Traders, obviate any further misunderstanding, and allow us all to get to practical business.

But I must not let myself be tempted to stray into any further discussion of the numerous and alluring topics which are crowded into this stimulating book. My duty is discharged in commending it to the public as a valuable and distinguished contribution to the national symposium on the revolution which is being brought about by the war. There are indeed some who think that all such speculations are idle and based on a false hypothesis. When the war is once over, they tell us, we shall all hasten to return to the old ways. Its lessons will soon be

forgotten, and a few years hence everything will be very much the same as it was before. For my own part I differ entirely from that view of the probabilities of the future. No doubt it is possible to exaggerate the effect which even the greatest external events can have upon the character of human beings. The men and women who survive the war will be the same men and women, and it would be a moral miracle if they should be entirely transformed by it. But it would be even more miraculous if the catastrophic experiences of the last two years did not leave a permanent mark upon them. Apart from its material effects which both in the way of destruction and construction are simply immense, the present struggle is certain, as it seems to me, to leave behind it a profound change in the national spirit and outlook. Whether we like it or not there is no possibility of getting back into the

old grooves. When the war at long last comes to an end, we shall find ourselves confronted with a maze of difficulties such as no generation of men, of whom we have any record, have ever had to face before. As the war itself is the greatest in history, so will its aftermath be the most prodigious. And upon all those, who are not of necessity wholly absorbed in the conduct of the war itself, there rests no higher obligation than to think constantly, strenuously, connectedly, with soberness but also, if they are fortunate enough to possess it, with imagination, of the new measures and methods by which those difficulties may haply be overcome. To that kind of thought, serious, practical and constructive, the following pages should afford valuable aid.

MILNER.

Chapter I

SCIENCE IN EDUCATION AND INDUSTRY

IN a recent conversation between two friends the complaint was made that there existed no clear and systematic national plan or policy for the development of the Empire after the war. This complaint was discussed, and both friends concluded at last that it was unfounded, that there did exist—though too often expressed in a fragmentary way and much obscured by personal and party questions—a clear and simple course before the country. The two friends attempted a plain statement of this course, and came to a very complete agreement upon it. Their attempt seemed so to clear up their own ideas that they think the results may appeal to a wider circle. They have ventured to compress them into some three or four letters (in which it may be noted two hands are engaged), believing that what

they will have to say will outline a complete and consistent liberal and progressive policy in British affairs. They find they can approach the whole matter most conveniently by coming into it in reference to the recent discussion of the national neglect of science.

For the last quarter of a century one of these writers has been interested in the movement for the development of science teaching and scientific research in this country. He has been equally impressed by the excellence and by the futility of the criticisms levelled at our higher educational organization, from the days of Matthew Arnold to the recent gathering in the rooms of the Linnean Society, when, under appropriately asphyxiating conditions, witness after witness testified to the suffocation of science in British affairs, to waste, disastrous ignorance, and murderous indifference to knowledge in our administration, and to our planless future. The figure of Sir Ray Lankester still haunts his memory, Sir Ray, with a corrugated brow and troubled eyes, asking in a kind of perplexed whisper what it was held us back, why, with so overwhelming a case against

neglect, with such instances and proofs, in these days of tragic and bitter demonstration, we still even now were not *getting on* to any real expansion either of scientific education or of the organization of research.

Science and the Public Services.

Sir Ray Lankester's answer to his own question was to attack the Civil Service Commissioners. They have a bias in favour of the old classical education, and they load the scales against science by overmarking Greek and Latin subjects and undermarking science. In practice this closes the big public services to the science student. Clever and ambitious boys are drawn over to the classical side; they acquire an 'anti-modern side' habit of mind and a certain contempt for the modern side residuum. The science of the country suffers doubly—first, because the abler and administrative men are unscientific and ignorant of science; and, secondly, because science does not get the pick of our young men. The case of the scientific men for an immediate scaling up of the marks given for science in the Civil

Service requirements is overwhelming and unanswerable. Nothing that is written here is to be taken as detracting from the urgency of that demand.

Nevertheless it is arguable that obstruction by the friends of the old-fashioned education among the Civil Service Commissioners does not exhaust the account of the forces that blockade science from this country. The diagnosis of our scientific congestion, our scientific atrophy, may be carried farther. The question may be a much wider one than it is generally supposed to be. The British neglect of science may be not a specific trouble in itself, but a symptom of some much deeper and more general trouble. It is possible that in attacking classical dons, University prejudices, Convocation clerics, scholastic stupidity, national apathy about science, journalistic ignorance, and so on and so on, the scientific progressive has been attacking on too narrow a front and at the wrong point in the front. It is conceivable that British education will never be extensively altered in this way; the experience of a quarter of a century at least points to that conclusion. It is conceivable that the educa-

tional problem is not a problem-in-itself at all, and that when we begin to regard it as a part in a much larger problem, as part of the general problem of national reconstruction, we shall find that, instead of our difficulties being increased by this enlargement of purview, they will be found to vanish away.

This, at any rate, is the thesis now presented. It is submitted that the problem of national education and the problem of economic reconstruction are inseparable and cannot be dealt with apart. They must be part of one plan, the national plan. What other problems may also enter into this plan may be deferred for a later date. The present thesis is quite enough for this opening discussion.

The Great Dye Question.

Everybody is familiar at the present time with what we may call the instance of the dyes, the great dye question. That may serve very well as our type case. What is true of the dyes will be found with a rough parallelism to be true of metallurgy, engineering, the electrical industry, and so

on. The story of the dyes as it is usually told is the story of a British discovery exploited by Germany because Germany was developing and was able to get to work at once with a large class of properly trained mediocre chemical investigators, while Britain had no such class available. At a comparatively trivial amount spent upon scientific education Germany captured an industry not merely worth twenty million and more a year to her, but giving her, as we now discover, remarkable military and political advantages. So far we endorse the story. But then comes the implication that had Britain laid down, as one lays down wine, a few thousand chemical students in the 'eighties and 'nineties to mature, at a cost, let us say, of a thousand pounds a head or so, nothing of the sort would have happened, and that all that we have now to do after the war is just to set aside an annual million earmarked 'chemists,' and then all these arrears will be made up to us.

But, indeed, the business is not so simple as that. We submit that it has been practically impossible for Britain to produce that class of technical chemists

up to the present time, that no subsidizing of education, however generous, would have enabled her to do so, and that without changes far more extensive than a mere endowment of technical universities and colleges she will still be unable to produce it.

There comes in at this point something which is generally spoken of as the apathy of the British manufacturer. Everyone has heard of his remarkable refusal to employ technical chemists and scientific experts, even such few as we had. And everybody has heard of those wonderful German firms that keep one hundred, three hundred, six hundred industrial chemists constantly at work. From that the narrator proceeds to vehement abuse of the conservative British employer, whose only ambition is to be mistaken for a country gentleman, who lives by his grandfather's routines, deserts the works for an estate, shoots pheasants, and so on and so on. We are all familiar with the shrill indictment, the popular novelist-reformer is for ever at it. The 'apathetic' manufacturer shares with the 'clerical headmaster' his acutest indignation. Such

social criticisms brighten life, but they fail altogether to exhaust this problem.

Our Old Economic System.

Indeed, they scarcely touch it. Even if the British manufacturer lived always in his shirt-sleeves and never washed his hands, and kept a torn-out page of a chemical text-book pinned above his shaving-glass, he would still not be in a position to employ a large staff of technical chemists. He cannot do so because his business and his plant are not upon a scale that permits that sort of thing. In that lies the gist of this matter. The British economic system developed some generations before the German did, before electricity, and concurrently with the railways; it is older, it is more old-fashioned, its parts are upon a different scale. America and Germany have developed the present economic system upon that larger scale which the enormous development of means and rapidity of communications in the nineteenth century have made possible. Britain was doing very well on the older scale. Necessarily one must state things

crudely, but the broad fact in the business issue between Britain and Germany during the last quarter-century is that Britain has been a country of a great number of little hundred-thousand-pound businesses, so to speak, with a tradition of mutual competition, with, indeed, competition preached as a gospel, and Germany has been a country of fewer and co-operating five-million businesses and combines. All sorts of consequences follow from that essential structural difference in the two systems, but the only one that concerns us now is in its relation to the industrial application of science.

It is one of the commonest delusions of unwary minds that things can be reduced to scale and still remain the same sort of things. But for most practical purposes that is not the case ; you cannot reduce a house to scale, for example, because of the doors and windows, and our legislative amateurs in popular economy will probably discover in a year or so that the psychology of investing five shillings is not at all the same process writ small as the psychology of investing a thousand pounds. In the same way, though a million-pound business

may be easily able to sustain and profit by fifty chemists, of whom one now and then makes a paying discovery, it does not follow that a hundred-thousand-pound business can profitably sustain any chemists at all, much less keep up a laboratory for five. Although a State containing a number of big businesses may maintain a multitude of industrial scientific investigators employed in them, it does not follow necessarily that another State, although it contains many more businesses, and those of a greater aggregate value, can, if they are businesses on a smaller scale individually, employ any investigators at all. It certainly does not reflect unfavourably upon either the intelligence, the energy, or the patriotism of the business men in the small-scale-business country, and it is high time that that sort of blame, which entirely confuses the issue, ceased. And although the colleges of the latter State, the State on small-business lines, turn out chemists and investigators by the myriad, it does not follow that they will be efficiently employed, at least until they can learn to live on the wages of a boy clerk and experiment in an outhouse for the love of knowledge and their employer

with three test tubes and a Bunsen burner. The tendency of the best among them will be to emigrate to the big-business State. Perkins and his aniline dyes go to Germany. To educate without creating opportunity is to set a bonus upon the export of national ability. In other words, big business, progressive methods, and scientific research come together and must come together. Syndicating businesses and organizing scientific education and research are two aspects of the same job.

The Pattern of 1920.

The conclusion follows from these considerations that those who are attacking the problem of the industrial reorganization of the Empire and those who are working for educational reconstruction need to join hands. Apart both movements are likely to be far less effective than upon a broader common intention. Apart each may much more easily fail. The British industrial and business problem is to scrap the methods of 1850–60, and *not* to imitate Germany with a copy of her 1890–1900 methods, but to go right ahead to the 1920

pattern. What that pattern should be it is in its general form not very difficult to say, whatever discoveries in detail remain to be made. The experiment of controlled establishments, the experiences of trusts and combines, German State socialism, the theories of guild socialism, are all in the solution. When one watches a process of crystallization ever and again one sees a jerk and a shift as the growing crystals adjust. Such an incident occurred recently. This was the big amalgamation of Brunner Mond and Co. and Castner Kellner and Co. The shares of both companies appreciated at once. But why should amalgamation in the chemical industry stop at Brunner Mond and Co. and Castner Kellner and Co.? Why not face the present desirability and the final necessity of a still more comprehensive crystallization, and prepare now to bring in the British Empire itself as an active and contributing partner in the ultimate combination?

Brunner Mond and Co., it is said, have never had a strike, retain their men for exceptionally long periods, train many of them specially, and pension old men off. They do this with no pretensions to philan-

thropy, but because it pays. But no small hundred-thousand-pound concern can afford to do anything of the sort; it works on a narrower basis for too immediate ends. A chemical industry on an Imperial scale can, on the other hand, do things on a far wider basis, can work for larger and remoter advantages, and turn its vast profits far more directly to the enduring benefit of the community. It can plan such a liberal and comprehensive treatment of labour as no smaller employer can attempt. The minor employer deals with his men by the hour, day, or job; he has to take them as they come 'out of the unknown' to him; he is unable to treat them generously as they age; he is powerless to help their children; indeed, to do his duty in any way beyond the immediate business in hand. But a nationalized industry can see the life of labour as a whole, and can deal with its own section of organized labour not through a mere string of isolated jobs, snatch-profit occasions, and petty disputes, but as a scheme of lives; can guarantee ease presently in return for energy now, and can formulate and realise big, thorough, efficient, economical, and racially beneficial

schemes of education, training, selection, direction, and research.

In this time of reconstruction there are two entirely divergent ways in which the new education may develop : one leading straight to Britain's last muddle, and the other to an Imperial renascence. The first is the traditional national method, planless, incoherent, wildly wasteful. It begins in a tangle of agitating bodies, committees, and organizations ; it goes on to much zeal, more anger, storms of blame, scraps of fine performance, the setting to work of conceivably quite large numbers of professors, instructors, demonstrators, and students, who won't understand quite *why,* who won't understand quite *to what end,* who will get all sorts of knowledge perhaps, but certainly no knowledge of the ends and methods of the business machinery in which their knowledge is required. And so on to disputes, bitterness, inadequate opportunities, wasted lives, and an ultimate triumph of some better-organized foreign State. That is the easier way, the greater probability.

Research Amalgamated with Industry.

The second way is a replanning of scientific education and research, concurrently with, and as a part of, a systematic amalgamation and co-ordination of industries, so that the same men who plan the plant may have a decisive voice in the education of the men who will work the plant. The boys and girls in the schools and the men and women in the technical college will be instructed in, they will be parties to, the great national industrial undertakings. Instead of thinking of leaving school, as one routs out of bed on a cold morning, and plunging into an alien world of insecure, generally distasteful, and, from the employee's point of view, unmeaning employment, they will think about and choose and prepare themselves for the part they will play and the career they will follow, if not in most cases to conspicuous success and usefulness, then at least to an ordinary conclusion in comfort and leisure, in the national life.

This, then, is the present thesis; that if they wish to be anything more than an academic voice crying vainly in the darkness,

Sir Ray Lankester and his friends of the British Science Guild must set out and take counsel with and understand those captains and organizers of industry and those labour leaders, whose primary concern should be the reinstatement of the national economic life after the war. There must be mutual inspiration and help, a common theory and a common aim. Talking about national scientific education without talking about social and economic reconstruction is ploughing the sands and beating the air. The effort to save the minds of the next generation from those clerical, social, and merely scholastic powers, amiable, but unimaginative and ignorant of present-day needs and possibilities, that at present so fatally control our educational machinery, is doomed to certain failure unless it is part of a far more comprehensive scheme.

So far we have insisted merely upon the correlation of education and industrialism. Certain subsequent arguments will seek to extend this correlation so as to demonstrate the futility of any sort of piece-meal reconstruction at the present time, and the necessity for one national plan. And, further, we shall attempt to state in plain,

broad terms the lines upon which such a plan must be drawn if it is to succeed. These ideas will be the very carefully thought-out views of the writer, and they will be set out as the basis of a campaign of reconstructive effort. Our British world is at present a confusion of fragmentary good intentions and partial proposals. We discuss the projection of tariffs and we discuss the organization of labour without considering the profound difference it makes whether we are dealing with the projection and manning of a chaotic world of individualistic businesses run for unchecked private profit or a system of amalgamated businesses in which the public interest is the controlling shareholder. A man may very well be a violent Free-trader and trade unionist in the former alternative and quite the reverse in the latter. We are going about the business of our national future like a family which is acquiring an automobile by sending father out to get some sort of good engine, it doesn't matter what, mother to back her fancy in carburettors, Frankie to get acetylene headlights, Bertie to buy wheels, and Georgie to buy tires, regardless of each other and the weight and

size of the whole, leaving the rest of the equipage to happen somehow, while sister Beatrice sits at home inquiring into the respective merits of the petrol and the steam engine, and Caroline looks through the accounts to find out whether the family can afford to set up a car of any sort at all.

But, indeed, the future of the Empire is now either one whole, one plan, or—failure and fragmentation.

Chapter II

SCIENTIFIC AGRICULTURE AND THE NATION'S FOOD

IT is probable that historians will mark the year 1914 as the end of the Socialist movement; it was an ailing movement before that time, and after the war we shall find new oppositions and new formulæ replacing the obsolete '-isms' of the former age. This is not to say that Socialism will be counted to have failed. No movement can be said to have failed which has sat so triumphantly on the grave of its antagonists as Socialism has sat upon the grave of *laissez faire*. But the movement combined general ideas of the utmost sanity with methods of utter impracticability, and, while the sounder elements of the Socialistic proposal have so passed into the general consciousness as to be no longer distinctive, its rejected factors shrivel and perish as things completely judged, and its name becomes a shelter for 'rebels' and faddists.

Perhaps the deadest part of Socialism now is all that centred about the idea of

'expropriation.' In the 'eighties the Socialists were always discussing the taking away of the land from its owners and of capital from its owners, 'with or without compensation.' The fiercer sort were very stern against compensation. At the most they would consider humane provision for the declining years of the more elderly rich. They regretfully abandoned the idea of a punitive treatment of Dives so far as this world went. And then the economic system was to be handed over to the most marvellous officials, who were no doubt to spring forth at once in limitless numbers from the brains of the Socialist propagandists ready equipped for their task. The early Socialists expounded their doctrine with the blithest disregard of what one might have imagined was a fairly obvious fact, that *you cannot suddenly create whole new classes of men.* That is the common error of almost all the revolutionary schemes of the study and of the work-room alike. It was the English Fabian Socialists who first betrayed a doubt of the practicability of this sensational change of hands. Being largely recruited from the ranks of Government clerks, who did at least corre-

spond about affairs, the Fabians perceived a necessity for prepared bureaucrats.

Absurdity of 'Expropriation.'

That Fabian doubt has grown now to a complete understanding of the absurdity of any proposal to 'expropriate' owners and rebuild the social world anew with new units of an entirely different sort. There can be no interval for such a reconstruction; we may change the world indeed as much as we like, *provided we keep on going all the time,* but we cannot do the smallest change that involves a week's stoppage. So that while on the one hand the bulk of reasonable men in the Empire have come over to the primary Socialist assertion that food production, transport, all the big industrialism are matters not for the profit-seeking of private ownership, but for public administration, it has also come to the completest realization that it is impossible to wrench these services suddenly from the hands that control them to-day. We cannot cut to-morrow off from yesterday; the world will be of the same men. Without any preachment or propaganda we all

find ourselves to-day drifted into a virtual agreement upon the reasonable course of economic development. It is a development towards nationalization ; so far we go with the Socialist, but it is a development not by the Socialist's panacea of 'expropriation' at all, but by amalgamation, by co-ordination and co-operation, by bringing the State into partnership, and an increasing partnership, in the big businesses that result from those amalgamations, by developing the crude beginnings of the 'controlled establishment,' by the *quid pro quo* of profit-sharing and control in the national interest in exchange for the national credit and a helpful tariff.

This outlook for the land and the food supply of the Empire opens some broad questions of very remarkable interest. It is not one of the least of the compensations for this war that it has necessitated experiments upon an otherwise impossible scale in the handling and rationing of the people's food and drink, and upon the conversion of private into quasi-public businesses. There has been haste and no doubt there has been much waste and a considerable variety of incidental inaccuracies and abuses,

favouritism, jobbery, the wrong man in this place and the crooked man in that, but on the whole this series of improvised 'nationalizations' is full of suggestion and encouragement for the more deliberate and permanent readjustments that must be made after the war. The most striking demonstration has been of the practicability of the State coming in as the food buyer and distributor, and of the great possibilities of control and participation that this opens out to us, first, of the already very extensively syndicated popular provision trade of the country, and secondly, of the cultivator. The State can step in here with a minimum of social disturbance. It need expropriate nobody, it need confiscate nothing, it leaves the landlord his acres, the farmer his farm, the wholesaler his warehouse, and the retailer his shop, but on the one hand it can insist upon certain standards of quality, wholesomeness and cheapness, and on the other upon certain standards of cultivation. The great advantage of the quasi-public big business is that the profit the State partner seeks is not a dividend but the public welfare. It can afford to buy even

at a loss a crop which is socially beneficial, it can afford to sell even at a loss a product which is wholesome or socially stimulating. Its true profit is a highly cultivated country and a well-fed, energetic population. Big business, and particularly State business, means wide views and distant ends, and they are attainable in no other way.

The Use of a Tariff.

The use of a tariff in regulating international trade relations is entirely consonant with the general trend of modern thought. When Socialism spent her declining years rejoicing over the grave of *laissez faire,* the kindred superstition of Free Trade, the superstition that all goes well with a land if only you leave imports alone, lay waiting to join its parent in that grave. But there is also a danger—and nowadays it is the great danger—of becoming just as blindly superstitious about a tariff.

A tariff is perhaps a necessary part of any national economic scheme, but it is not in itself an economic scheme. Nevertheless there does seem to be a superstition in some quarters that if only the price of a

commodity which it is desirable to produce in this country is driven up and its importation checked by a tariff, that commodity will necessarily be produced adequately and sufficiently in this country. This, at best, would be a lazy-tongs way of doing things, but also it is the wrong way. It does not exclude the possibility of a permanent scarcity of the desired product, of an economic hold-up, and of large private fortunes being made at the public expense. A tariff, we must bear in mind, varies in public value with the economic constitution of the State it protects. In an individualistic State of uncontrolled and irresponsible businesses it becomes very easily a means of looting the general public and impoverishing the country. The really formidable opponents of tariff projects are shrewd men acquainted with human nature, and quite free from any superstitions about the automatic blessedness of everything under free trade. But they will not have the faintest toleration for any tariff that, for example, will tend in their opinion to make farmers lazily fat and send up the landowners' rents in a time when it is the bounden duty of everyone to be lean and active. The

country will not stand a merely protective tariff in foodstuffs, or in any commodity.

A Bonus for Farmers.

Considerations of this sort have recently produced from one ex-Fabian Socialist, Sir Leo Chiozza Money, a scheme that is, to say the least of it, of very considerable interest. It proposes that, roughly speaking, the State, by co-ordinating the present wholesalers and distributing agencies, should buy all the food in the country and hand it out to the retailers. It would buy first the national produce, and this it would buy with a view to developing the highest and most beneficial forms of cultivation. It would then supplement this supply by buying through the Colonial Governments and importing the surplus colonial output. Finally it would, if necessary, complete its needs by buying in the cheapest foreign market. It would of course buy at three price levels, and it would in effect subsidise the home grower, who would have as his encouragement not a protective tariff but a bonus price. And the cost of this encouragement would fall not upon the

poorer sort of consumer, as a tariff would do, but upon the general community, which would be profiting by the security and prosperity of agriculture and by the increased national safety to which a well-maintained agriculture conduces.

The reaction upon the life and quality of the farmer, although it would be neither revolutionary nor in any way violent, would nevertheless be very considerable. With the State as his buyer he would no longer be under any necessity to dodder into the market-town with his bits of produce on a market-day and pick up scraps of scientific farming amidst the quizzing of the farmers' ordinary. It is the privilege of the customer to call the tune of the seller, and the State buyer would also be the State Department of Agriculture; the Department of Agriculture, in concert with existing buyers and wholesale distributors, would not only be buying the national produce, it would be conducting the teaching of agricultural science, it would be maintaining experimental farms and agricultural research, it would be controlling the systematic improvement of breed and seed, and working with the syndicated national chemical

industries for the supply of fertilisers. And the farmer would no longer be unable to take up the new better methods because of the smallness of his scale and the shortness of his views, or free to hump his back and declare that what was good enough for his father was good enough for him. The State buyer would be in a position to indicate, and to indicate with a certain authority, the best seeds, the best breeds, the preferable methods. He would have an eye, too, to the welfare of the farmer's hands, and some power to object to such obsolete and wasteful methods as contrive to muddle along at the grave social cost of underpaid labour. He would be in a position to press the too individualistic farmer towards a co-operative use of machinery, of dairies, and such-like plant.

Syndication without Confiscation.

So in the matter of the land, just as in the matter of industrial production which was discussed in our first chapter, the alternative to the development of grave social stresses as the outcome of the war—stresses that may easily develop upon a quite cata-

strophic scale—seems to lie along the line of the syndication and nationalization of existing public services. This does not necessarily involve the transfer of control to public officials but rather the conversion of the existing direction to the national service. It recognizes, organizes, and renders more responsible and efficient a state of affairs that the wholesale and distributive syndications of the last few decades have already partially and informally brought about. Without confiscation, revolution, or personal hardship, it opens the way to a state of affairs when all the land of Britain will be administered as if it were one great estate for the general national benefit.

And the attention of those who are agitating for extensive reforms in our education is particularly drawn to the way in which the development of a great system of scientific study and teaching follows almost necessarily upon such a national organization of agricultural production as a part of its development. Scientific education on the biological side becomes no longer an educational blind alley, a protesting ineffectiveness; it leads straight to appointments,

influence, and usefulness. It is a point that we believe to be of extreme importance, and one that seems to be overlooked entirely in the current discussion of educational reform, it is a point that a study of the history of scientific and technical development in Germany will completely endorse, that economic reconstruction must if anything precede, and certainly must accompany, any large development of scientific and technical teaching.

Chapter III

THE LONG VIEW AND LABOUR

IN no relationship, not even in relationship to the inevitable hostile competition of Central Europe, does the making of a national plan for the reconstruction of our economic life upon bigger and less individualistic lines become so suddenly urgent as it does in relation to the possibilities of acute labour trouble after the war. The very great sense and understanding of the labour masses have consented to a general truce in labour disputes during this vital conflict. There have been breaches of the truce, it is true, but always with very colourable justification or through peculiar instigation, and I think there are few of those who have watched the labour situation during the last quarter-century who will not agree that the general willingness and loyalty of our workers under the test of war have been remarkable and of the most hopeful augury for the future of the Empire. It will be nothing less than shameful on the part of those who rule us and of those who control

our industrial life if they are unprepared to meet the men at the peace with something better than a resumption of the pitiful old struggles. And just as it has been maintained in two previous chapters that the key to a successful scientific competition with Germany and the key to a proper development of the home food supply lie alike in comprehensive amalgamations and syndications into which the State enters as a controlling partner, so now it will be argued that the key of escape from a chaotic and disastrous series of labour conflicts lies in the same process.

Every age expresses itself in transitory oppositions which it believes to be permanent, and the thought of every age is hampered by the oppositions of its predecessor. We talk and write too much as if we were still in the extremely individualistic world of Herbert Spencer and the Manchester School; as though every man were to be assigned either to the class of capital or the class of labour, as though capital were a system of freely competitive employers working for profit and labour a system of freely competitive workers struggling for a living just above the margin of

existence, and as though the State were nothing but a restraining influence upon the massacre that would otherwise naturally ensue. With the whole nation unified as it has never been before in the most honourable struggle in its history there are yet people who can still imagine that such base chaotic scramblings are the continuing conditions of civil life. But, indeed, such conditions are as dead and done with as slavery—or Harriet Martineau. Unhappily they have left abundant traces upon the relations of employer and employed, and, in particular, upon the ideas and traditions of labour, a legacy that may yet greatly embarrass the development of a new and better England.

Employers and Trade Unions.

Nearly all the mixed peoples of the British Isles are generous-spirited and good-humoured people, but it is idle to approach the question of labour without recognizing the distortions of resentment, suspicion, and unwillingness that have been left upon our naturally genial, popular mind by the experiences of the Selfish Age,

the age of the medium-sized competing businesses, in economic development. The workers, faced by employers who were obsessed by the idea of getting as much work for as little money as possible, and who were indeed, *because of the scale of their businesses,* unable to take the long views that can disregard immediate losses or advantages, developed a quite ferocious resolution to give as little work for as much money as possible. Neither side was thinking of the community or the future, because the conditions were too close, because the business was on too small a scale to admit of that. The trade unions grew up, we have to remember, as the organization of a resistance to near-sighted exactions; their primary purpose was the protection of human life from an irrational and destructive pressure, and that primary purpose has left its form upon trade unionism to this day. The original trade unions, to put it bluntly, aimed at shirking. They were indeed perfectly justified in aiming at shirking, at less work and more pay, in the presence of an industrialism that aimed only at private profit, at more work for less pay, and that canted about 'liberty'

whenever it was reminded of the most elementary duties towards housing, education, sanitation, and the national and Imperial future. And it is merely foolish for people nowadays to set up an outcry at the restrictive and obstructive traditions of trade unionism and to expect these highly defensive organizations of the less educated to leap forward open-handed to greet the slowly formed and still very imperfect realizations of public duty on the part of the owning and employing classes. It is scarcely less just to blame the employers for sweating to get profits. Both sides were demoralized by the old conditions. Both sides are still imperfectly adapted to the new possibilities and necessities. Neither has much right to call the other side short-sighted and narrow. They have to go to school together if the Empire is to be saved.

It is hopeless for anyone to discuss the future of labour in Great Britain who does not bear continually in mind this legacy of lurking suspicion. It is a vital part of this problem that whatever is not done openly now, whatever is not clearly and fully explained now so that most workmen and most employers understand it, will be

misinterpreted and blocked by popular distrust. Economic reconstruction must be a general act. It is an idle dream, and all too prevalent a dream, to suppose that any great economic reorganization can be brought about by quiet meetings of bankers and big business men and unobtrusive bargains with Government departments. The workers are going to be restive at any changes they cannot understand and watch. Whatever reorganization is attempted must be done in the daylight; it must be set out quite plainly in the popular Press, it must be forced upon the attention of the worker; he must be made a party to every step in the national process. That he can very easily be made a party, that indeed already there is coming in from the labour side and expressed in labour terms a closely kindred movement to the movement for quasi-nationalization that is coming from above, will be almost immediately pointed out.

The Scale of Business.

Let us insist again upon the dominant idea that runs through all these letters,

which is *the importance of scale*; in this connexion this takes the form of the proposition that the relation of the management of the business of manufacture to the worker varies in its nature as the business varies in its scale. The difference in scale makes a difference in kind. The relation of a man who employs just two men to those men, differs from the relation of the director of a hundred-thousand-pound business to his workers, and this again differs from the relation of a State trust to its workers not simply in scale but, because of the difference in scale, in almost every other conceivable respect. The last two relationships differ almost as widely as the act of taking a passing taxicab and the act of buying an estate. As the business merges in the State we pass from the question of selling hours of labour to the question of how to make the best use of a whole life. We pass from an antagonism of buyers and sellers of work to a scheme for a common welfare. And there come into the field of vision considerations of Imperial and racial benefit that are entirely beyond the range of the Selfish Age.

The old conception of labour was well expressed by the term 'hands.' The employer took his hands on as he listed and paid them off when he thought fit. His business fluctuated widely, as small businesses must. When he didn't want his workers he kept them loafing about outside his gates doing nothing, waiting for a job. He did not lose by that very much, *but the Empire did.* Moreover, he employed them when they were still imperfectly educated and immature. He made what he could out of them; what they became was none of his concern. He did not lose by that, *but the Empire did.* He dropped them at the first sign of age, and he did not hesitate to work them so that they aged rapidly. He did not have to keep them when they were incapacitated, *but the Empire did.* He fought them with lock-outs and was gallant against a strike. The men and their families degenerated during their conflicts, but there were always other men to be found. He won his fight, perhaps. But we will not italicize again. The Empire as employer cannot afford to treat its man power in this fashion. The quasi-

nationalized business can confer with the State and with organized labour and scheme a use of labour that will be at once far more profitable to the community and far more acceptable to the worker. For example, it seems to be demonstrable that much more can be got out of a man if he works intensely, continually, and hopefully for quite a few years than if he works hopelessly and unwillingly for all his life. Very few private employers can bargain with a man upon the lifetime scale; but the nationalized industry can. It can pay in that most attractive of all wages, security; it can guarantee a man's ultimate leisure and independence. The private employer cannot arrange that the worker shall remain under training up to 18 or 20, so increasing his ultimate efficiency; the national employer can. And it is in this direction of the quasi-national business that our urgent international position, our national welfare and the happiness of the people alike point. Whether we think of Imperial success, social efficiency, or human comfort and happiness, the conclusion is the same.

Guild Socialism.

It has already been suggested here that no movement in the direction of national trusts has any prospect of success if it is made a matter of private arrangement and secret intrigue. Such methods are not only contrary to the suspicious nature of a modern democracy demoralized by industrialism, but they disregard and waste the enormous possibilities of contributory assistance in an even partially educated populace. And it is in this connexion that more attention needs to be given by organizers and directors of industry to those comparatively modern developments of labour thought which figure as Syndicalism and Guild Socialism. These ideas are stirring great numbers of the younger workers, and they are receiving quite inadequate notice in the general Press. Our governing class, thanks to the facilities for a classical education existing in Great Britain, know far more about the ideas of the Gracchi than they do about the notions that such people as, for example, Mr. Cole and Mr. Mellor and the Editor of *The New Age*, are spreading industriously in the country.

No doubt there is much to be said for the systematic snubbing of these busy propagandists. England would not be what it is if we did not snub, but large sections of the workers are not snubbing these people and these ideas. Let us by all means continue to snub them, take it out of them socially and so on, but let us at least see whether some use is not to be made of their ideas. These new ideas among the workers need not make for conflict, but they certainly will make for conflict if they are ignored. That is the important fact to grasp. These new views are apt to be couched in terms of class hostility and in the old aggressive and now irritating phrases of militant Marxism, but essentially these new views are constructive views; from the labour side they really present what is a reciprocal movement to the trend of the employer organizations towards trusts and national associations. Like all labour movements, they tend to disregard the practical difficulties in the way of a complete change of control; they do seem at times to contemplate—just as the older Socialists did—a revolutionary change of control. There is no recognition of that fundamental principle

of statecraft upon which we have already laid stress in these papers—that *new social classes cannot be suddenly created.* But this misconception is bound to correct itself at the first attempt at realization, and so it has none of the importance some frightened magnates may be disposed to give it. The fact—the very valuable and cardinal fact—remains that this group of movements of which Guild Socialism is the most typical is rapidly preparing the minds of large masses of workers for industries upon a national scale, and making the position of the hundred-thousand-pound business even worse than it would otherwise be. We have to allow for prejudice and unreasonableness on both sides of this question. Naturally a popular movement will demand a new sort of democratic control, with every porter and ticket-clerk voting upon railway management, and naturally the railway directors (who will, after all, become the national directors) regard this proposal with quite needless horror, because both sides are obsessed by this idea, that with nationalization some entirely novel sort of management can be immediately improvised. If only the business organizer could

be induced to see what a pious aspiration is the democratic control of the Guild Socialist, how apart it is from the rest of the question, and how inevitable is the continuation of the existing control into the new conditions, he would perhaps be readier with help and a welcome for what is really a most valuable educational movement. He is in practice, if he would only realize it, as irremovable as—Mr. Asquith.

Gifted literary men have been obliging us recently with picturesque speculations upon the profound psychological changes that are going on in the New Armies. We must not be too ready to recoil from their highly imaginative assurances to the opposite extreme of supposing that the ten millions or so of people who have been engaged either in Army or Navy or upon some special war-time work have not got a very much clearer idea of the possibility of great national businesses and a much stronger disposition to prefer direct public service to work under individualist control. With every desire to be unimaginative, one feels the probability of such a change in the general mind. It is a change altogether upon the lines we have been laying down.

Opportunity, current thought, and the new disposition of great multitudes of people march with our Imperial necessities.

In our two preceding chapters it was sought to show that the essential of a plan of national reconstruction must be the reorganization of business and agriculture upon the lines of national trusts. The thesis of this chapter is that it is possible, desirable, and necessary to change the life of labour concurrently with this process of industrial nationalization, and to replace the chancy, insecure, distressing, discouraging, and publicly wasteful method of employment on a basis of weekly and even hourly wages by much longer and fairer forms of engagement. This is a change that can only be effected with the consent and concurrence of labour, organized or unorganized. The national plan must be a public plan—no Peace Book hidden away in Westminster and jealously guarded from the curiosity of 'outsiders' will serve; the broad ideas of any effective national plan need to be canvassed in the popular Press; the mind of the New Labour needs to be cultivated and has to be respected. Syndication upon a national scale, and

with extreme publicity and public participation—such, it is submitted, are the lines, and the only possible lines, upon which we must go if our Empire is to wax and not wane in the new era that this war begins.

Chapter IV

PROBLEMS OF POLITICAL ADAPTATION

IN our three preceding chapters it has been propounded that the ruling idea to adopt in our national policy, the idea about which the rest of our policy can be built as a body is built upon a backbone, is the idea of national syndication, the idea of grouping and amalgamating our industries, our food supply and our labour organization, upon a national scale; that only upon those lines can we hope to make our industries scientific and progressive, defeat foreign competition, secure a satisfactory home food supply, and come to an understanding and keep the peace with labour, and that the alternative to such a reconstruction boldly and openly planned and carried through is decadence and Imperial disintegration. We have now, if our plan is to be a complete one, to go on to the consideration of a much more subtle and intricate matter, the legislative and administrative changes that are needed for the effective carrying out of this

reconstruction. We ask—with a negative answer in our tones—whether the existing machinery is equal to the task. If it is not, we ask, then wherein does it fail? What are the minimum changes and the least disturbing methods of change necessary to clear the way to these vital economic developments?

Want of Clear Thinking.

It is the purpose of these chapters to be plain and elementary, to put what we believe to be the stark essentials of a hopeful scheme of reconstruction, of what the writers believe to be the only possible scheme of reconstruction, with the utmost bareness and simplicity. We believe that there is at present a dangerous want of clear general thinking upon the national outlook and a dangerous disposition to undertake piecemeal changes without any comprehensive vision. We believe that this is one problem, and not to be dealt with miscellaneously. The misconception is still too prevalent that it is 'practical' to work with one's nose right up close to this question or that, and 'theoretical'

and useless to get a little way off and look at what we are doing.

In no relation is this small-business method of feeling about things rather than of thinking about things, of making our estimates with the point of the nose, so to speak, instead of the cerebral hemispheres, more evident and more evidently mischievous than in relation to projected legislative developments. These have to be envisaged largely, we passionately believe, or patched disastrously. It is evident that our Legislature and Administration work slowly, lack initiative, are not really in touch with the mind of the community, and so keep the community in a fever of unrest. The Press and public discussion are full of complaints, instances of failure, accusation of lost opportunity and shirked responsibility. But they are confused and incoherent complaints, they do not seem to produce any real working project for political reconstruction, they are almost as unhelpful to the forming of a plan as the moaning of a patient is to the formation of a diagnosis. Let us, therefore, make an attempt here to sort out the constituents of what is probably in its very

essence a confused and complex trouble. Let us try to distinguish the factors in the political tangle. It is probable, we suggest, that it is not one thing wrong but several distinct things wrong, things not very closely correlated, that makes our existing government so slow, so evasive, and so generally unsatisfactory—and, when we consider the task of reconstruction before us, so hopeless. There may be quite separable things wrong, and each thing wrong may demand quite separate treatment.

That at least is the suggestion we are making here. That is our present thesis. We are going to suggest here that there is not only a complexity of origin but a masking of symptoms in this case.

The Machine of Government.

The complaint on the surface, as we hear it, is that the undoubted slowness and clumsiness of British government are due to the predominance of lawyers in politics. Gentlemen unversed in affairs give us to understand that government should be in the hands of men of science or 'business

men,' regardless of the fairly obvious fact that men of science are most properly engaged in the advancement of science, and that the proper business of a business man is to mind his own business. As a matter of fact politics and government have always been, and will always be so long as human communities endure, largely in the hands of lawyers or lawyer-like persons, and this for no other reason than that they are matters of systematic human relationship, which is only another way of saying that they are matters of law. In an autocracy the lawyer may have to propitiate the autocrat, in a democracy the lawyer may have to propitiate the people, but under any form of government he remains the intermediary, the active agent, the minister between men and men. This is so obvious that this outcry against lawyers already changes its direction, and in the place of a simple Jack Cade-like proposal to be quit of them altogether we are getting analyses of the 'legal' type of mind, and complaints, with which we ourselves are in far more sympathy, that the organization, procedure and education of our legal profession fall short of modern needs, are still

essentially Gothic and mediæval. We are, in fact, no longer asked to slaughter our lawyers, but to bring them up to date. The modernization of the political lawyer is quite a different proposition from the abolition of the political lawyer, and apart from such special questions as the relation of the two branches of the profession to each other and the relations of the advocate to the judge, questions with which these papers will not deal, its discussion passes indistinguishably into a discussion of a general liberal education. As a part of that discussion we will return to it in a later paper.

But our suggestion here is that whatever the present defects of the legal tradition and the legal training may be, they are not really the major reasons for our present clumsiness and unconstructiveness of government. They are at the utmost a minor contributory reason. We want to suggest that our existing governing machine is, quite apart from the percentage of lawyers in it, an unsuitable instrument, a misfit, a very incomplete and unsatisfactory adaptation to current needs of forms of government originally set up under

conditions of communication and transit and economic production that carry us halfway back to the Bronze Age. We suggest that this governing machine of ours has hitherto always been patched up for fresh needs at the latest possible moment under a maximum of urgency and with a minimum of efficiency, and that it is possible not only to scheme out but to carry out much more drastic and fundamental re-arrangements. Reform Bills, Parliament Acts, Home Rule Bills, quieter but more effectual changes of method and relationship than have been, of course ; the political history of the British Empire for a century has been very largely a history of a struggle to adjust, but it is still open to question whether any step has ever been taken except as a reluctant minimum concession to a need already flagrant. And about the suitability of this patched-up fabric to control the vast changes demanded in our immediate future it seems to us there can be hardly any doubt at all.

The Three Estates.

The form of the British governing machine was of course determined long ago

by the needs and conditions of a comparatively small feudal monarchy, a monarchy with practically no manufactures and only a very trifling interest on the sea, in which there was no such thing as a town as big as Winchester is now; and its three tiers of King, Lords, and Commons still represent very fairly the three organs, as it were, of such a simple community, first the law and the State, secondly the landowner, the land administration, and thirdly the tenantry. All the references of the governing machine are references to practically autonomous localities—the Lords have chiefly territorial titles still, the members in the Commons still represent local interests; everything was localized, because in those days, apart from the Crown, there were no such things as non-local interests, such interests as a participating share in a railway system, a bicycle business, colonial trade, foreign investments, chemical industries, or book-printing, for example, give a man to-day. The modern State contains not three organs, but a great number, some of which have no representative at all in the government as distinctive organs, and some of which get a representation in disguise, as

when some great railway man or some great Colonial man pretends to be the landlord of Thistown or Thatshire, or some energetic industrial organizer assures us that he represents the southern division of Cowshire. None of these modern organs has a representation that has any thought-out proportion or relationship to that of the many other organs in our intricate modern State. It is only by assuming that there is a special national providence that we can assume that our governing apparatus can be anything like the best possible for the Empire ; and the whole mass of our present discontents argues that it is not so. Upon three distinct lines, we submit, we can challenge these existing arrangements and point to conceivably better ones.

Local Reference.

The first of these defects of the British Parliament is this question of local reference. We assert that, for a large and increasing number of citizens in a modern State, locality has only a residential interest, and often even that residential interest is transitory, and that the major aspect of the

existences of such citizens is towards some trade or industry or occupation of national dimensions. The real 'estates' of a modern community are cut up politically into kaleidoscopic fragments and distributed among topographical constituencies. We have on the one hand 'representatives' of such places as Croydon or Hampstead or Battersea, whose inhabitants have scarcely anything in common except a postal address, and, on the other hand, if we want to deal in any satisfactory way with the transport workers or railway servants or medical men or electrical engineers, we have to go outside the formal Constitution altogether and discuss matters with trade and professional organizations that have neither legislative nor administrative power, that may not represent the entire profession or industry concerned, that are often mere organizations for restricting work and raising wages without any tradition or sense of public function. Yet straight ahead of us is a time in which it is manifest we must either reconstruct our economic life on a larger scale or succumb to a better-organized State, and the only means at present in existence for the vast discussions

and agreements between employer and employed that are necessary to this reconstruction are these not very efficient and essentially defensive labour organizations on the one hand, and the voluntary organizations of employers on the other; and between these two, to direct their co-operation and adjudicate, is this old-fashioned Legislature, with its obsolete reference to localities and to the social grades of the Feudal Age and its admitted practical ineptitude. Perhaps the shortest way to economic reorganization may lie in lifting most of the task out of the scope of the Legislature altogether, in largely increasing the powers and scope and responsibilities of the great labour organizations on the one hand, in bringing both them and the national councils of the employers and proprietors of the great industries into the structure of the Constitution, in insisting upon joint conferences and joint action, and in leaving Parliament little more than the power to endorse or veto the outcome of these joint deliberations. But this will be to set up an industrial state beside the feudal state. On the face of it this may seem to offer a less serious break with older

forms and habits than an attempt to supersede or supplement the existing methods of Parliamentary representation by national occupational constituencies ; but that is not our opinion. In reality we believe it is a far more dangerous method than to attempt a courageous reform of representational method.

The increasing disharmony between Parliament and our urgent national needs, due to this persistence of local reference when the whole drift of things is towards broadening the interests of every citizen who matters beyond the limits of any localized constituency, does not by any means exhaust the tale of our legislative inefficiency. There is next the unwieldiness of both Houses, and thirdly there is that persistent tendency to a bilateral system of conflict about false issues which is denounced as the ' party system.'

With regard to the former point we are dealing once again with another instance of that blindness to the question of scale on the part of the British which has been the burden of all these papers. It would seem to be the most obvious of propositions that there must be in legislative assemblies, as

in other bodies, a size for maximum efficiency. But it is a proposition extraordinarily disregarded. Above a certain optimum of size the numbers must become too great for attention and discussion, and the assembly begin to tail out towards a mob, to lose will-power and intention, and obey the laws of mob psychology; below it, the assembly must be insufficiently various and representative. Yet our House of Commons seems to have been put together with an entire disregard of any such possibilities, and new peer after new peer has been added to the House of Lords without any thought whatever of the mechanical effect of these additions upon the vigour of the whole.

The Party System.

Much graver than its unwieldiness is the persistent bilaterality of our Legislature. Party has turned legislation into a duel, and party interests and party loyalty have blinded men to the future dangers and opportunities of the Empire. But why has party been able to do this, and whence does party derive its strength? This is a

question to which an answer exists, but it is a question very rarely answered. We read a great deal of rather clamorous matter in the popular Press about the abolition of the party system, but a careful examination of such utterances reveals no project of how the party system is to be abolished. A small but active section of journalists inspired by Mr. Sidney Low's very able criticisms (in his *Governance of England*) of our methods of government has made his views its own, has claimed them as its own, and used them as a basis for much aimless rhetoric. But no attempt whatever has been made to analyse the processes that have given and must give a Legislature this bilateral character. To do so would have been to abandon irresistible opportunities for indulgence in conspiracy mania. It was more romantic and attractive to present party as a conspiracy of the rich. A soberer inquiry into this defect, as into most defects of our British system, will go far to restore our faith in British human nature and in the remediable quality of our difficulties. The true source of Parliamentary bilaterality had been analysed in anticipation half a century ago.

From the days of Hare and John Stuart Mill onward there has been a progressive analysis of the character and effects of voting methods, and it may now be taken as demonstrated that, wherever the common and obvious method of giving each voter in any election a single non-transferable vote is adopted, it follows necessarily that there can be no real decision between more than two candidates, and further it follows that the affairs decided by such voting will gravitate continually into the control of two antagonized party organizations. This is, of course, tame stuff compared with heady shoutings and accusations against plutocrats, rich Jews, privileged families, and party funds, but it is the simple essential of this question. Voting, like any other process, is subject to scientific treatment; there is one right method of voting which automatically destroys bilaterality, and there is a considerable variety of wrong methods amenable to manipulation and fruitful of corruption and enfeebling complications. The sane method of voting is known as Proportional Representation with large constituencies and the single transferable

vote, and it is as reasonable and necessary that the country should adopt it as soon as possible as that it should adopt the right types of aeroplane and the best sorts of gun. The advantage of this method is not a matter of opinion, but a matter of demonstration; it needs but an hour or so of inquiry to convince any intelligent person of its merit and desirability and of the fatal and incurable mischiefs of any other method. It is the custom of the melodramatic school of political writers to speak of Proportional Representation as a 'fad': but it is no more a fad to want the methods of proportional representation in Parliamentary election than it is to want copper wire instead of ginger-beer bottle wire in an electrical installation, or wheaten flour instead of chaff in a loaf. With it Parliamentary institutions will work freely; without it they will certainly choke and block in any great emergency.

Party manipulation and the political irrelevance due to our method of voting, unwieldiness due to our national disregard of the importance of scale, and a complete failure to shape out or present in any way the real conflicting interests and classes

of a modern community, a failure due to the antiquity of the machine, these are the three categories of our Parliamentary failure. They are, so to speak, the mechanical defects of our government. They are continually preventing and perverting our national effort; they waste time and energy enormously, while before us now lies a period wherein we cannot afford to waste either time or energy, when indeed nervelessness, evasiveness, and dilatoriness mean the certain downfall of our Empire.

The cure of these mechanical defects, we would assert, constitutes a group of urgencies that can be considered apart from another set of problems that looms far more insistently upon the public imagination. These latter are the problems of Imperial reorganization, of Colonial representation, for example, upon an Imperial Council. Pursuing our scheme of a complete review in outline of a possible national and Imperial policy, we shall take these up in our next paper. Here we would claim only to have set out and established a statement of defects as a preliminary to this inquiry, and to have

indicated cause for a change in the size of Parliament and in the method of electing representatives.

Chapter V

AN IMPERIAL CONSTITUTION

OF the four chapters that have preceded this, the first three have been devoted to three aspects of the thesis that the central idea about which any scheme of Imperial reconstruction must be grouped is the idea of economic syndications upon a national or Imperial scale; that about this idea the agitations for scientific education and scientific method, for tariff defence and aggressive industrialism, the perplexities of the national food supply, and the rational solution of the labour problem, group themselves into a coherent national plan, and that they can group themselves hopefully in no other way. The fourth chapter took up the question of the sufficiency of our Imperial Legislatures for this task. That chapter was in the nature of a clearance of the ground; the popular attacks upon the predominance of lawyers and upon party government were considered and shown not to cover the essentials of the case. Atten-

tion was drawn to the widely disregarded failure of Parliament to represent adequately those great modern estates of the realm that have no local reference, such, for example, as the engineering and transit industries. It is from this point that we would now carry on.

Our view is that these great economic syndications upon a national scale, which is the only possible means of saving and developing the British Empire against the dangers and competition that threaten it, must be settled, and can only be settled, with the understanding, participation, and consent of both labour on the one hand and the existing proprietors, directors, and managers concerned in these economic systems on the other. It is absurd to suppose any sudden and violent change of system in these things; the arrangements of yesterday are the only possible material we have for the arrangements of to-morrow. We want to see labour inspired and stimulated by our new sense of common needs, in conference with capital, quickened by a sense of extreme national danger, upon these great constructive projects.

Present Methods of Representation.

Now our case is that our Parliament as at present constituted is a gathering of representatives not of interests but of localities, and, considered as representatives, very badly elected even at that. It is not equal to this vast and intricate task in its present state, and so we have either to perform an operation upon our Parliamentary institutions far more drastic than any previous Reform Bill, or to contemplate a still more novel possibility in the appearance of, so to speak, a collateral state, a conference of labour and capital outside Parliament, reconstructing the economic life of the community regardless of Parliament, and quite possibly developing friction with Parliament from the very beginning of its attempt. The possibility will be so alarming to conservative-minded people that they will be strongly disposed to recoil from either, to fall back upon the dignified passiveness of 'wait and see; it will last our time,' and so to leave our children to drift on to the decline and humiliations, the internal conflicts and national disasters of a national obsolescence that we, at any

rate, may never live to witness. Anything, we submit, is better than that counsel of despair. The alternative we would advocate here is the bolder and more hopeful one of political reconstruction, of a courageous recasting of our Parliamentary institutions to meet the needs of the new time.

And here again we would attack our problem by bringing in a whole set of wider problems, the problems that arise out of the manifest necessity at the present time first for a clearer definition of the relationship of the various parts of the Empire one to another, and then for the establishment of some permanent method of relationship that will exclude the possibility of war, first with our present Allies and secondly with the United States of America. We may find the method of beginning with the widest possible problem, the general problem of an Imperial constitution and an international peace league, makes the confusion of problems of national and colonial government fall into place and proportion in just the same way that the idea of a reconstruction of economic life by the syndication of businesses and the control of agriculture upon a national scale clears

up the otherwise aimless tangle of domestic politics.

Let us consider in the order of their extent the possible political bodies and world associations that loom upon men's imaginations at the present time. The widest dream of all is the dream of a League of Peace. This is a possibility, even a probability; it may be some sort of league that will include America, or it may be a league of our present Allies; but its nature must necessarily be one that puts it outside our present inquiry. It will have to be based on treaties; it will be diplomatic in its nature; its character will not reflect back in any structural and necessary way into the general political life of the constituent States. Its indirect and prospective consequences in the security of all its constituent States will, of course, be enormous, but we are writing here not of such indirect and ultimate consequences, but of the way in which the widest considerations must determine the form of the narrower problems, and from that point of view councils of the Allies and Leagues of Peace may be left out of this discussion.

A Council of Empire.

Coming now down the scale to the next synthetic idea we have the dream of a council of the whole Empire, the dream of a defining by some comprehensive constitutional law the at present extraordinarily informal relations of the various parts of the Empire. Everybody perceives that the Government of Great Britain is not really representative of the Empire it rules; Great Britain is remarkably in the position of a trustee minding the affairs of various kindred minors and of various races and communities temporarily incapacitated from independent sovereignty, and almost everybody feels that this must necessarily be a temporary arrangement and that what is desirable marches with what is just, when we look to a recasting of this complicated system of relationships in which Great Britain will no longer be sole director, but merely a partner in partnership with its former Dependencies. So far as the Dominions go that are predominantly of British descent, the Dominions that are pleased to be called Britains beyond the seas, it is quite conceivable that there may

be political unifications of a very thorough sort, but so far as the great masses of non-British people go, peoples with alien racial and national traditions, the idea of assimilation is equally unacceptable with the idea of continuing and unending subjection. Ireland has taught the British the folly of rash and premature experiments in amalgamation, and it is clear that the future of the non-kindred parts of the Empire, such as Egypt or Rajputana or Bengal, lies along the line of education and autonomous development to the position of free and equal allies in one great Imperial confederation. So far as these non-British peoples are concerned it may be questioned whether the setting up of any common Imperial Council to include them is advisable. So far as they are concerned it may be wiser at present for the trustee to continue to administer.

That does not mean an arrest of political development. It means that these mainly Oriental dependencies, which are now in phases of profound economic reconstruction and which are emerging rather rapidly from ancient and primitive political conditions to the possession of a Press and to a

steadily increasing racial and national self-consciousness, have still to show their quality and difference under modern conditions, have still to shape. They may presently be plainly developing on lines so similar to the lines in the development of our own community that our sons may be able to take up the question of an equal and parallel share in a common Empire with some confidence; or they may display so essential and incurable a divergence that the problem may have become manifestly the problem of an alliance of dissimilars. We know too little to foretell which of these directions will be taken, and meanwhile we submit that the general policy of the Imperial Government is to keep things going, to release every tendency that does not threaten the safety of the Empire, to give the native every chance and every opportunity that is not plainly mischievous, to encourage experiment as much as possible and to direct it as little as possible, and in and out of season steadily, persistently, to set up and maintain in the minds of ruling race and subject race alike this idea of the trustee, the idea of 'when you are ready to take it back your land is yours.' Upon

which lines of thought it is clear that the idea of a council representative of the whole Empire recedes also from our problem.

An Imperial Parliament.

That leads us to the next stage down the scale, to the idea of an Imperial Government which, while still acting as a trustee for the non-kindred races and nations under the Imperial Crown, will be no longer merely representative of Great Britain, but of what Mr. Hughes has accustomed us to speak of as the Britains. We would suggest that this is a practicable proposition, and that the general form and composition of this new Imperial Parliament can be indicated. We believe that the development of the present British Parliament into an Imperial Parliament with oversea representatives, together with the relegation of purely English, Welsh, Scotch, Irish, and Ulster concerns to subordinate assemblies, involves the solution of endless squabbles between Celt and Saxon, and is the next necessary step towards a secure and efficient Empire.

First we would point out that there are a number of functions that would be far

better performed by such a broader-based Parliament. The first of these is the support and maintenance of the Navy and naval establishments and fortifications throughout the Empire. The second is the control of the Expeditionary Army and the maintenance of a skeleton military establishment for the Empire by which the national service militias that must certainly follow this war could be gunned, mobilized, and directed in an Imperial crisis. The third is the Imperial control of the food supply and of the Imperial resources of raw material. The fourth is Imperial transit, posts, money, standards, ports, and seaways. The fifth is the common Imperial trade policy. The sixth is the supreme direction of education, not with any power of prohibition, but with unlimited powers of endowment, to maintain the common language and the supply of higher education universally throughout the Empire. The seventh is the maintenance of the Supreme Court of the Empire. The eighth is the control of foreign policy and the continuation of the Imperial trusteeship over the non-represented Dependencies. Such, roughly, are the functions which an

Imperial Parliament could discharge, and could manifestly discharge more conveniently and with a broader basis of support than our present British Parliament.

In setting it up there would be ample opportunity of remedying the manifest defects of the existing Legislature, of pruning its numbers, replacing the bilateral vote by the proper method of voting, and making it really representative of the estates of a modern community. And we suggest that this can be done without the destruction of the outward form of the existing British Parliament, and indeed without any very dramatic breach of continuity.

Lords and Commons.

It has already been pointed out that the opposition of Lords and Commons in the British Parliament represents nothing but the factors of landlord and tenant in the originally agricultural British nation. The main factors of a modern State are not there; the main factors of a modern State are first Direction and secondly Democracy or Labour. The main function of a modern Legislature is the conference

and co-operation of these two powers. The essential necessity in the process of conversion which has been blundering and struggling along in British political affairs for the last ninety years has been the conversion of the House of Lords into a House of Directors and of the House of Commons into a representative Democratic assembly, but so far as the former goes it is a valid complaint that the landlords do still remain disproportionally represented, while a considerable amount of Direction has been forced into the Lower House; and so far as the latter goes, that the retention of localized constituencies has masked the proper representation of labour and forced it into irregular and collateral forms of expression through irresponsible or inadequately responsible Trade Unions. The manifest common sense of our present necessities is to complete this hitherto blind and confused effort of our Parliament to adapt itself to modern conditions along lines that the industry of a considerable number of ingenious writers has already made fairly plain and continuous.

The modernization of the House of Lords that these speculations have worked

out does not present itself as a very terrible or revolutionary process. The essential idea in most of these suggestions is to extend the method of representative peers, already used in the case of the Irish and Scotch peerage, to the entire peerage. All the peers now either sitting in or voting for representatives in the House of Lords will become, it is proposed, members of a new body of electors, to whom will be added a considerable number—some thousands, certainly—of leading men, directors of great businesses and public services, men of science and learning, lawyers, administrators, soldiers, admirals, and so on, all the people who ought to be placed or whom it is advisable to place upon the honours lists. Whether these electors will bear titles or not does not matter here. But they will be classified by functions; there will be a faculty of transit, for example, a military faculty, a faculty of literature and education, and so on, and each faculty will elect its quota of representatives to sit beside the law lords in the Imperial Upper House. In this way, it is pointed out, with the minimum of revolutionary disturbance, we can get a modernized House of Lords.

This is clearly no mere Utopian project. It is quite a workable and practical method for the rearrangement, for the simplification and clearer responsibility of those unco-ordinated persons who already 'exist' as our directors and leaders; it is the minimum change needed to give an efficient Upper House.

Occupational Constituencies.

And for the Lower House, if we want to get a clear statement from and a clear understanding with the mass of the people, if an Imperial plan is ever to be made plain and acceptable, it is equally evident that we must be prepared for a rearrangement of our population for the purposes of Parliamentary elections into national occupational constituencies, so that instead of labour being partially and imperfectly represented by men subsidized by levies made upon more or less representative Trade Unions and Socialistic societies, and sitting ostensibly as members for Hanley or Halifax or Blackburn, we shall have groups of members directly representing Scotch Minerals or Australian Transport or British Textiles or the Army and Navy. Instead

of a crowd of vague and amateurish legislators representing with a conscientious unmeaningness unmeaning areas, we shall have men representing certain national functions intensely, and just as a diagram of the circulation or the nervous system or the muscles shapes out the whole body, so these men through their special wide interest will shape out the whole nation and the Empire. In both Houses we shall gain enormously in sincerity, directness of method and authority. We shall have the real living interests of the country in direct touch with legislative and organizing power, and the vast series of misunderstandings upon falsely conceived issues and all the passion, social conflict, disorder, and delay that are otherwise inevitable in the time of great reconstruction ahead will be cut out. We shall no longer have labour represented often by mere mischief-makers, maintained and returned to Parliament in the queerest ways, boasting that they are 'rebels,' and conceiving their highest purpose as the obstruction and annoyance of the national administration. We shall, instead, get men as keen as the masters for effective national action. With such a reconstructed Legis-

lature, we submit, our Empire will reconstruct with swiftness and vigour, and stand renewed. In no other way, we are persuaded, can great social stresses be avoided. This, then, is the right way for the country, the proper national plan for efficiency, the plan that all reasonable men must combine to see that the nation understand and approve it. We have small doubt that this is the right way, and that the need to take it is urgent. The days of leisure have passed. There is the right way now before the British Empire, or there is destruction. 'The world will not wait for the English' another score of years.

Chapter VI

HIGHER EDUCATION IN THE EMPIRE

AND now, having drawn in a rough but nearly complete outline the nature of the task of reconstruction that we conceive to lie before the British people, we return to the question from which we set out, the question of a better education.

Throughout these papers we have not so much argued as taken for granted that no modern State may hope to achieve any effective reconstruction or remain at any satisfactory level of organization without the assent and understanding of most of its people. This has been fully recognized and attended to in this first great attempt at national organization that has so startled the world by its power and efficiency—the German Empire. In this new phase of high organization, upon which Germany has been the first to enter, and into which the rest of the world is now passing, there must exist something more than unavoidable interests and coercions, there must be a

closer nexus than that to hold man to man in the common effort; and just as far as these will-destroying links are superseded by understandings and willing participations, just so far does the national efficiency cease to be mechanical and become a living reality. This education, this plain explanation of the State and of the intentions of the State to the common citizen, was necessary in the pioneer experiment of Germany; it is far more necessary to the coming developments of the Allied League and the British Imperial system. Our British peoples in particular are all more intractable under education than the Germans and far more suspicious and difficult, but once their reluctant confidence is gained they are probably much more generous and helpful. Our economic and political organization will be futile if it does not carry with it an organization of our at present aimless and confused national intelligence. Quite apart from that technical education which is necessary for the economic efficiency of the citizen, there has to be an education of the national mind in general ideas. That is the mental side of these material developments. To think of changes in factory and

Legislature without thinking of changes in school and Press is like thinking of going for a walk with one's left leg only, leaving the right at home.

The Two Aspects of Education.

Since our aim in these papers is to be severely elementary, to establish a very plain, firm outline of reconstructive policy, we will make no apology for insisting upon the all too frequently disregarded distinction of these two aspects of education, the technical and the liberal. Upon the former we do not propose to write further here. We believe that in the last decades there has already been set up an admirable and hopeful system of scientific and technical research and education in Great Britain, that requires little more than the stimulation, correlation, generous enlargement and greatly increased endowment that national economic syndication will give it, to meet the needs of the Empire fully. We will add nothing to the many things that are being said at the present time about the usefulness and urgent need of good teaching in Russian, chemistry, economic botany, or the like.

These things will come naturally and in the way of business in a syndicating State, and they will come sufficiently in no other way. They are, therefore, questions of detail, very important detail no doubt, but detail, and our purpose in these letters is to avoid detail and to keep our outline clear. It is upon the other side of education, the liberal education of the citizen as distinguished from training and useful accomplishments, that opinion seems least formed, and upon which it is more necessary to attempt lucidity.

A series of national critics from Matthew Arnold onward have attacked the defects or absence of a liberal education as the fundamental weakness of the British system. We are, as a people, charged with inaccessibility to general ideas, with want of imagination, and want of that foresight which demands imagination; we are told we are platitudinous, confused, and instinctive—if it were not that we were instinctive there would be little grace in us. It is one of the consolations of this war that Matthew Arnold is no longer with us to say, at a hundred disconcerting revelations, in a tone of irritating mockery, 'I told you so.'

They say we are aimless, having nothing to hold us together for any great purpose, that we are a nation adrift. The last of this series of sorrowful rather than angry critics, Mr. Clutton-Brock, tells us in his 'The Ultimate Belief' :—

'They [the Germans] have made their country the tidiest, the most efficient, the most powerful in the world, and an intolerable nuisance to all mankind. Clearly, then, their notion of goodness is not our notion; but we need to know what our notion is if we are to keep our minds free from the contagion of theirs. And we have made little effort to know what our notion is or to teach it to our children. We cannot teach it to them unless we know what it is, unless we know what we believe about the mind of man, about the purpose of his life, and about the nature of the universe. Without this knowledge our teaching must be dull and incoherent and unconvincing, and our children will rebel against it, as, indeed, they often do. There is in England a great deal of blind rebellion and wasteful reaction among the young.'

And so on. There is no gainsaying it. It was true in the 'eighties, and it is still true

to-day. And we need to draw together our chaotic thought and will into one Imperial will and understand, just as urgently as we need to draw together the individualistic chaos of our economic life into one systematic unity.

'The Stupidest of Oppositions.'

Now it is not our intention to take sides in what is probably the stupidest of all stupid oppositions—the opposition of natural science to 'the Latin and Greek classics'—as though either of these 'groups of subjects'—shall we call them?—constituted a liberal education. What all these educational critics and reformers are talking about is neither of these things; it is the lack of enough coherent philosophy, enough depth and breadth of vision, enough sense of history, enough curiosity or animation, in the minds of our people, and particularly of our ruling people. It is ridiculous to suppose that the substitution of an inaccurate knowledge of organic chemistry or mineralogy for an inaccurate knowledge of Latin and a pretence of Greek will make any change for the better

in these respects. Compulsory elementary chemistry for the arts degree will be just as big a nuisance as the present compulsory smattering of Greek at Oxford and Cambridge. And it is quite beside the mark that the educational institutions of this country had made remarkable progress towards efficiency in the teaching of modern languages and chemistry and physics and manual training in the last twenty years. This may sharpen us and brighten us at points, but it will do nothing to unify the national will or to inspire our co-ordinated national institutions with a common understanding.

What should constitute the education of the public man? This is something above and outside his attainments, his accomplishments, his business equipment, his knowledge of Russian or economic biology, or the petrol engine or what-not. These are secondary things. But what should make the man so that he will know how to rule and know how to serve? What is the backbone stuff? The answer to-day is surely not essentially different from the answer a Greek would have given in the time of Plato. He would have said

nothing of the importance of compulsory Egyptian or Sanscrit, and equally nothing of a knowledge of simples or metal working. But he would have said that the backbone stuff must be a clear and critical knowledge of oneself in relation to God and to the universe. That, we submit, under modern conditions means for an Englishman a thorough study of philosophy and of history —not merely the history of England or of a part of Europe, but of the world from its problematical beginnings to the present, which means that he must know with some thoroughness the *story* that physical science, ethnology, and archæology have to tell, as well as human history. No doubt such a general knowledge must be supplemented by a critical and intensive study of some special aspect of the world's process, by a more thorough treatment of history, through the classics, or through a modern history course, or through comparative anatomy and embryology; these are questions for the educationist; but that philosophy and history in some form, together with the social science that necessarily springs out of historical or biological teaching, constitute and alone can

constitute the liberal education which must be the substance of a nation's culture seems to us scarcely to need arguing. It would be incredible to us, were it not obviously the fact, that anyone could accept the Cambridge Mathematical Tripos or the strange miscellaneousness demanded for a London degree or a degree course in physical science as any more of a liberal education than the qualification of a pharmaceutical chemist.

What is a Liberal Education?

Now we would point out that here we are claiming very little more as a liberal education than what is already attempted in the Oxford final schools in *litteræ humaniores* and modern history or in the Cambridge Classical Tripos Parts I. and II. All these three comprehend philosophy, history, and criticism. What we would put beside these leading courses is a biological science tripos that includes modern philosophy and a tripos in 'natural philosophy' that went into speculations upon the origin of things, and we would add to the present history school as alterna-

tive supplements and substitutes, syllabuses in Asiatic history, medieval history, the developments and varieties of Christianity, the Islamic story, economic history, ethnology, and archæology. We do not believe that any course of study composed almost entirely of language study, or of mathematics, or of physics and chemistry, is to be regarded as a liberal education, though all these studies fall necessarily into place in one or other of these wider schemes. And we object altogether to the idea that bodies of faddists should be allowed to impose such tiresome *compulsory* futilities as mixed mathematics or botany or Greek upon a liberal education. Greek, Sanscrit, Russian, mathematics, botany, petrology, all must play their part in this or that school, but it is ridiculous to pretend that a liberal education is impossible without them, and that is what all these compulsory-subject people do pretend.

We would like to repeat our conviction here that the antagonism of science *versus* the classics in education is perhaps the most mischievous and certainly the silliest of all confusions of issue that prevail at present. It is high time that this muddling and

heating misrepresentation of the matter were laughed out of court.

And having brought back into this discussion of education the distinction between what is technical and what is liberal, having shown that technical and scientific education, in its narrower sense, is really an aspect of economic organization, to be organized in relation to that and to be separated entirely in our thought from liberal education, and having laid bare again what everybody knows who is not confused into and lost among secondary questions to be the reality of a liberal education, we come to the question what classes in particular should have a liberal education.

We submit that in a modern democratic community everybody should have a certain amount of liberal education quite over and above their merely occupational training, their French or Russian or chemistry or botany or mathematics or what not. Without a general liberal education we can have no massive national intelligence, no sense of a common purpose and adventure, no general willingness. Lacking this, the majority of homes in the community will

be materialistic in the narrowest sense, unstimulating, and unproductive in the next generation of that sporadic ability upon which so much national progress has always depended and will always depend. But large sections of the public will necessarily have a not very deep or very critical liberal education, based rather on popular books and magazines and newspapers than upon thorough and sustained studies and thought. Where the quality of a nation's liberal education *tells* most is through those men and women whose specific function is in relation to the State as a whole, or in relation to the dealings of man and man, or in relation to the public mind; that is to say the politicians and lawyers, the churches and preachers, writers and journalists, the employers and organizers, the owners, every sort of determining and controlling person, the civil service and the medical profession, together with the women who are the wives and mothers, associates and counsellors of these people. These together constitute in its intenser form the national intelligence and the national will, and it is against these that the charges of Matthew Arnold and his

successors have been aimed and are still valid.

Feminine Education and the Lawyer Mind.

If one may attempt to concentrate vast clouds of criticism into a brief paragraph it is that the social life of those ostensibly educated classes who 'give' our thought and will as a State and as a community is wanting in coherence and vigour through the want of a really sound and generally prevalent liberal culture. Partly this is ascribable to a lamentable superficiality of feminine education in a community in which women take an unusually large share in political discussions, party conflicts, questions of appointments and the like; but much more is it due to the medieval organization and unsatisfactory general culture of the lawyers, who should be the natural medium between different types of men. The modern State needs politicians and lawyers who can take long views, who can think largely and constructively; in Great Britain our politicians and lawyers are too often men trained to think from hand

to mouth, full of the 'shop' of court and legislature, and habitually resistant to ideas. They have cramped minds and cramping methods, and their tone is reflected in the general tone of the community. They bring exceptional natural abilities to bear upon obstructive, cautious, and delaying expedients. We cannot do without lawyers, but we cannot do with lawyers whose training and outlook antagonize them to large progressive and constructive adventures. This country can no more do with old-fashioned lawyers than it can do with old-fashioned business methods and old-fashioned guns, and so any scheme for a policy of Imperial reorganization must certainly fail if it does not include the vigorous promotion of liberal as well as technical education, and a thorough revision in the light of modern needs of the procedure, organization, and qualifications of the legal profession and all the circumstances of the politico-legal career.

Social psychology is as necessary a study in the proper readjustment of a great Empire entering upon a new phase of economic existence as economics. The spirit of a profession changes with its

institutions, and we have hitherto been regardless of the changes in the social atmosphere wrought by changes in the conditions under which this or that class has worked. The British lawyer has 'happened' just as the British civil servant and the British schoolmaster have 'happened.' It is time that the successors of Matthew Arnold put an end to mere criticisms of our national intellectual confusion and embarked upon that process of analysis that leads to tangible educational reforms. This is an infinitely more delicate and subtle task than economic reorganization, but it is as necessary a part of the effort that lies before us if our Empire is to remain united and make its full contribution to the rising destinies of man. Happy go lucky and wait and see are at an end in mental as in material things.

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